

CLAIM SET AS AMENDED

1. (Currently Amended) A gear transmission device comprising:

a pair of first and second fixed walls, said first and second fixed walls opposing each other with respect to an axial direction of a first gear shaft;

a first gear positioned on said first gear shaft between said first and second fixed walls, said first gear being axially moveable with respect to said first and second fixed walls;

~~a vibration-reducing structure having an elastic member being positioned between said first gear and said second fixed wall; and~~

~~a regulating device regulating means for regulating an increase of a bending amount of the elastic member being interposed also positioned between the first gear and the second fixed wall, the regulating means adapted to regulate an increase of a bending amount of the elastic member by a predetermined value or more,~~

wherein the regulating means includes:

a plane washer having one face positioned against a planar surface on an end face of the second fixed wall;

a cylindrical portion being formed on a first opposed end face of the first gear;

an elastic member positioned between the cylindrical portion and the plane washer;

a predetermined space formed between the cylindrical portion and the plane washer in contact with the second fixed wall,

wherein said cylindrical portion is capable of operative contact with said planar end surface of said second end wall through direct contact with the plane washer, and is capable of regulating a bending amount of said elastic member to a predetermined amount.

2. (Currently Amended) The gear transmission device according to claim 1, further comprising a second shaft having a relatively large diameter gear on a first end and a relatively small diameter gear on a second end, with a space separating the relatively large diameter gear and a relatively small diameter gear, wherein said small diameter gear operatively engages said first gear positioned on said first gear shaft positioned between said first and second fixed walls.

3. (Currently Amended) The gear transmission device according to ~~claim 2~~ claim 1, further comprising a large diameter ring gear operatively engaged with said first gear, wherein said first gear is an idle gear and said first gear shaft is an idle gear shaft.

4-7. (Cancelled)

8. (Currently Amended) The gear transmission device according to claim 1, wherein said elastic member is a wave washer, ~~a Belleville spring or a rubber washer.~~

9. (Currently Amended) The gear transmission device according to ~~claim 8~~ claim 2, wherein said elastic member is a wave washer.

10. (Currently Amended) The gear transmission device according to claim 3, wherein said elastic member is a wave washer, ~~a Belleville spring or a rubber washer.~~

11-15. (Cancelled)

16. (Currently Amended) The gear transmission device according to ~~claim 12~~ claim 1, ~~further comprising a~~ wherein the plane washer is disposed in a position opposite to said cylindrical portion ~~and surrounding said elastic member.~~

17. (New) A gear transmission device comprising:
a pair of first and second fixed walls, said first and second fixed walls opposing each other with respect to an axial direction of a first gear shaft;
a first gear positioned on said first gear shaft between said first and second fixed walls, said first gear being axially moveable with respect to said first and second fixed walls;
an elastic member positioned between said first gear and said second fixed wall; and
regulating means also positioned between the first gear and the second fixed wall, the regulating means adapted to regulate an increase of a bending amount of the elastic member by a predetermined value or more,

wherein the elastic member has an outer dimension substantially equal to an outer dimension of the second fixed wall.

18. (New) The gear transmission device according to claim 17, further comprising a second shaft having a relatively large diameter gear on a first end and a relatively small diameter gear on a second end, with a space separating the relatively large diameter gear and a relatively small diameter gear, wherein said small diameter gear operatively engages said first gear positioned on said first gear shaft positioned between said first and second fixed walls.

19. (New) The gear transmission device according to claim 17, further comprising a large diameter ring gear operatively engaged with said first gear, wherein said first gear is an idle gear and said first gear shaft is an idle gear shaft.

20. (New) The gear transmission device according to claim 17, wherein said regulating means also includes

a cylindrical portion being formed on a first opposed end face of the first gear, and said planar surface on the end face of the second fixed wall,

wherein said elastic member is surrounded by said planar surface and said cylindrical portion, and

wherein said cylindrical portion is capable of operative contact with said planar end surface of said second end wall through the plane washer, and is capable of regulating a bending amount of said elastic member to a predetermined amount.

21. (New) The gear transmission device according to claim 1, wherein said elastic member is a wave washer.

22. (New) The gear transmission device according to claim 17, wherein the regulating means includes a plane washer disposed in a position opposite to said cylindrical portion.

23. (New) A gear transmission device comprising:

a pair of first and second fixed walls, said first and second fixed walls opposing each other with respect to an axial direction of a first gear shaft;

a first gear having cylindrical portion formed on one side thereof, the first gear being positioned on said first gear shaft between said first and second fixed walls and being axially moveable with respect to said first and second fixed walls,

an elastic member positioned between said first gear and said second fixed wall; and

regulating means also positioned between the first gear and the second fixed wall, the regulating means adapted to regulate an increase of a bending amount of the elastic member by a predetermined value or more,

wherein the regulating means includes a plane washer with an outer diameter substantially equal to an outer diameter of the cylindrical portion formed on the first gear.

24. (New) The gear transmission device according to claim 23, further comprising a second shaft having a relatively large diameter gear on a first end and a relatively small diameter gear on a second end, with a space separating the relatively large diameter gear and a relatively small diameter gear, wherein said small diameter gear operatively engages said first gear positioned on said first gear shaft positioned between said first and second fixed walls.

25. (New) The gear transmission device according to claim 1, wherein the one face of the plane washer has a surface area at least as large as that of the end face of the second fixed wall.

26. (New) The gear transmission device according to claim 1, wherein an outer diameter of the plane washer is substantially equal to an outer diameter of the cylindrical portion formed on the first gear

27. (New) The gear transmission device according to claim 1, when the cylindrical portion is not in direct contact with the plane washer, a portion of the elastic member extends pressing against the plane washer extends beyond the cylindrical portion, and

when the cylindrical portion is in direct contact with the plane washer, the elastic member is compressed and no longer extends beyond the cylindrical portion.

28. (New) The gear transmission device according to claim 1, when the cylindrical portion is in direct contact with the plane washer, the elastic member is compressed to a thickness substantially equal to an axial length of the cylindrical portion.